

## **Gandhi- Sustainability and Technology as Ideas of Political Practice**

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This paper attempts to draw the attention on how an intense political movement tried to address the question of technology while defining its praxis. It is particularly of relevance at least in the following grounds;

- (i) as how mass movements negotiate and appropriate different definitions and attributes of technology,
- (ii) as how a movement nearly a century back looked at certain political issues associated with technology that are still considered to be core issues, and
- (iii) as to look at how these articulations were located in the discursive terrain of colonial experience.

The proposals are temporally located at the colonial and late-colonial period of Indian history, more specifically in the first half of the twentieth century. Though most of the studies consider Mohandas Gandhi as an exclusive figure while discussing what is called as Gandhian School of Thought, this paper incorporates the views of J.C. Kumarappa, one of the most vocal advocates of Gandhian economic and technological program, and Vinoba Bhave, the 'spiritual successor' of Mahatma Gandhi, also to observe the collective assumptions of the school while it also posit the centrality of Mohandas Gandhi.

It forms a part of the wider articulations during the period about the possible visions of future independent India. While exploring the underlying notions of progress, self-government and national building that contained in the development goals that articulated in the late-colonial period, Benjamin Zachariah (2005) identifies three distinctive groups who were part of the process. There were the British Indian administrators, the Gandhians and the other nationalists referred to as modernizers. This paper emphasizes one of the groups for its exploration and attempts to observe how its protagonists constructed the narratives of science and technology as part of their political practice. It does not intend to assess how this rhetoric was translated into the practical schemes by the promoters or how it was contested by the

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contending ideological categories. Despite the fact that the Gandhian proposals of development were met with considerable challenge by the 1930s, and that it almost given its way to the 'modernizing' school by 1950s, this paper tries to emphasis a part of the intense and instructive phase of a debate wherein the fundamental aspects of science and technology were under close scrutiny.

Mohandas Karamchand Gandhi who was born in Gujarat in 1869 and was assassinated at Delhi in 1948 was an important figure in the early twentieth century politics of Indian subcontinent. Born in a wealthy upper-caste family, he was trained as a lawyer in Britain and practiced as an attorney in South Africa. While in South Africa, a personal experience of apartheid, as being thrown out of a first class train compartment despite having valid ticket, triggered his entry to active politics. His basic ideas of political practice emerged from the experience he accrued by organizing the Indians in South Africa. In 1914 he returned to India and by 1919 he emerged to be one of the significant influences in the nationalist movement against British colonialism. He spearheaded the transformation of Indian National Congress, till then a platform of elites and educated Indians resorting to formal and constitutional means of freedom struggle, into a mass movement. He was also instrumental in bringing about the freedom movement as a nationalist movement comprised of rural peasantry and the masses from being an elite bourgeois activity (Embree 1989:165; Khilnani 1998:125)

### **The Context**

The colonial experience that got rooted from the 17<sup>th</sup> century had drastic implications for the economy and society of the subcontinent. While the values of enlightenment and modernity that was part of the colonial project brought significant alterations to the society and polity, the economic impact of colonialism was deeper. It transformed a region that was among the most prosperous in the world till fifteenth century to one of the poorest regions in the passing of two to three centuries.

Though there were sporadic and disconnected resistances against the colonial powers from the beginning, the organized attempts against the colonial rule emerged only in the latter half of nineteenth century. By then, there emerged a elite of which one significant section demanded for the end of colonial rule. They resorted to mobilize

the people by instilling the values of confidence by glorifying the 'golden' past and 'civilizational' strengths of Indians. On the other hand, in a simultaneous process, the colonizers were vilified and ascribed them the root cause for all prevailing ills. All the different sections, including the supporters of colonial social reform projects, nurtured the post-colonial aspirations of developed India (though their definitions of development varied drastically). It is in this larger discursive frame Mohandas Gandhi emerges to political mobilization.

Unlike his predecessors and contemporaries, Gandhi attempted to address wide ranging readers/audience/activists. He made village as an important ideological category and the focal centre of struggle. Since the prevailing national movement was predominantly urban and elitist, Gandhi set to cater entirely wide and different categories of population that pose a methodological problem in assessing his works. His usage of terminology and ideas contextually varied to an extent that it may overtly looked contradictory sometimes. However, it is to be noted that, he employs the rhetoric of science and technology wide across the different sections, as a major issue in political debate.

Another problem we face while analyzing the works of Mohandas Gandhi is the centrality of 'Mahatma' (the great soul) Gandhi. The centrality of the personality poses two particular hurdles. The individualized ideology incited the followers to dwell into the problems and solutions Gandhi considered to be important and even his prejudices were spilled over to the majority (caste, gender, vegetarianism). It also prompted most of followers, later day analysts and commentators to confine on his works alone while discussing about it. Similarly, the terminology Gandhi uses blurs the concepts mutually. It overlaps across ideas of science, technology, machine, machinery, modern civilization etc. Moreover, his views are also changed over a period of time. On the same vain, spirituality and blatant superstitions are also found across his writings. It falls somewhere between his personal beliefs and conviction of the specific audience he addresses (being a very shrewd politician). Given the above background and disclaimers, let us look at how the issues of our concern were dealt.

### **Technology as a Problematique in Politics**

The Gandhian school of thought stood for a decentralized, self-reliant village based economic order with labor intensive rural and small scale agriculture and industries with the support of low technologies wherever required. The book, 'Hind Swaraj' (Indian Home Rule) published in 1909 (and banned in India in 1910 by the British government for sedition) forms the basic document of Gandhian thought. Gandhi poses a staunch attack on the western development model that he calls as the culture of machines.

*Machinery has begun to desolate Europe. Ruination is knocking at the English gates. Machinery is the chief symbol of modern civilization; it represents a great sin* (Gandhi 1909)

*Machinery is like a snake-hole which may contain from one to a hundred snakes. Where there is machinery there are large cities; and where there are large cities, there are tram cars and railways; and there only does one see electric light. English villages do not boast any of these things.....I can not recall a single good point in connection with machinery. Books can be written to demonstrate its evils.* (Gandhi 1909)

However, as he becomes an active participant in Indian politics, by 1920s the Luddite view is under change, and that remained more or less consistent throughout the rest of his life.

*'I have nothing to withdraw from what I said about machines in the Indian Home Rule.....I do not suggest today a destruction of all the machines, but I am making spinning wheel the master machine. The Indian Home Rule depicts an ideal state'*. (Gandhi 1924)

By mid-1920s Gandhi's views get more balanced and reasoned.

*'I had no quarrel with rail roads, steamers and many machines as such, but that I protested against the abuse that was at present being made of them, either for exploiting many nations of the earth or for destroying them'*. (Gandhi 1925a)

It gets further progressed to accommodating other issues particularly the labour displacement.

*'Machinery has its place, it has come to stay. But it must not be allowed to displace the necessary human labour.....I would welcome every improvement in the cottage machine, but I know that it is criminal to displace the hand labour by the introduction of power driven spindles unless one is, at the same time, ready to give millions of farmers some other occupation in their homes'. (Gandhi 1925b)*

When situations demand, he does not even averse of importing technology, as in the following case;

*'As long as we cannot make the machine required for utilizing the hide of dead cattle, worth nine crores, available in our country, I would be ready to import them from any part of the world'. (Gandhi 1927)*

As his earlier views about machinery attracted critical attention in all most all occasions, he used to provide specific messages on those grounds, and often reminded that what he resisted is the usurpation by machinery of the functions of humans and their consequent slavery to it (Gandhi 1929)

Similarly, in an interview to Edmond Demeter in 1931, he clarifies,

*'I am an enemy not of mechanism but of organized mechanism. I consider this system, which has become the basis of your civilization, as the greatest danger which could menace man' (Gandhi 1931)*

He further attempted to contextualize his viewpoints with more systematic reasoning;

*'Mechanization is good when hands are too few for the work intended to be accomplished.....It is an evil when there are more hands than required for the work, as is the case in India'. (Gandhi 1934)*

As he is more and more deep into the political terrain, and due to the partial waning of his ideas among the nationalists, he becomes more encompassing in his idea about technology as time pass by;

*'I do visualize electricity, ship-building, iron works, machine making and the like existing side by side with village handicrafts. But the order of dependence will be reversed. Hitherto*

*industrialization has been so planned as to destroy the villages and the village crafts. In the state of future it will subserve the villagers and their crafts.'* ((Gandhi 1940)

Even when mapping the transformation in his viewpoints one observe the significant space Gandhi attributed to technology in his political practice. Technology was a crucial factor/agent in articulating issues ranging from democracy, representation, progress, employment and equity. He considered choice of technology as the most crucial element in determining the production and distribution processes.

The school, through its different organizations like All India Spinners Association and All India Village Industries Association, both formed in the 1930s, proposed decentralized small scale industrial models that encapsulated the ideals like direct democracy, localized production and distribution, self-reliance of the community and there by the nation, and, political and technological emancipation through localized actions. At the same time, it began to recognize the inevitability of large-scale industries also.

*'Large scale industries are needed in exploiting natural resources which should form the raw materials of the people's industries. Control of such raw materials cannot be left in private hands. Therefore, all such industries should also be under the state.*

*In economics, large scale industry is the antithesis of democracy in politics. It is not by chance that the western nations have come by their economic organization. It is a result of their way of thinking in terms of autocracy. They find themselves with dictatorships in political organization, and centralized industries in the economic field. These two go together and we cannot have the one without the other.*

*If we aim at democracy, we have to abandon centralized production in consumption goods. This does not preclude all centralized industries. As we have already seen there is a definite field of such, though restricted'. (Kumarappa, 1945)*

### **Technological Metaphors in Political Practice**

Technological artifacts and metaphors have played a significant role in Gandhian political practice. It symbolized political meanings; it was through artifacts like spinning wheel and handloom cloth the deeper political messages like self reliance

and independence were conveyed to the masses. It was symbols, processes and products of grassroots mass mobilization.

*'The movement of spinning wheel is an organized attempt to displace machinery from that state of exclusiveness and exploitation and to place it in its proper state. Under my scheme, therefore, men in charge of machinery will think not of themselves or even of the nations to which they belong but of the whole human race'.* (Gandhi 1935)

*You cannot build non-violence on a factory civilization, but it can be built on self-contained villages. Even if Hitler so minded, he could not devastate seven hundred thousand non-violent villages. He would himself become non-violent in the process. Rural economy as I have conceived eschews exploitation altogether and exploitation is the essence of violence. You have therefore to be rural minded before you can be non-violent, and to be rural minded, you have to have faith in the spinning wheel.* (Gandhi 1936)

The school, thus, appropriated science and technology as a means of routine political activity. It integrated the technological process to the larger political process while infusing political ideals to artifacts and its design.

### **Contextual Relevance (Problematising Technology)**

Gandhian school gave primacy to the process, users and control of technology. Centrality and proximity of makers and users is of primary importance in this conception. Labour-intensiveness is considered to be a basic feature in the notion of technology and widely across, it is argued that technology should not replace workers in a populated country.

*'There is nothing good or evil in inanimate things. These attributes come into existence by man's reaction to these. A thing is good or evil according to as we put to benefit or harmful use..... Machines can be masters as well as servants.....Machine or no machine is not the fundamental question. The problem is one of finding the best way of not only supplying the material wants but also bringing employment to the people. Machinery which only saves labour is a curse in an unemployed or underemployed India, what ever it may be in other*

*countries. Machinery can only be used to make such things as hands cannot make and where will not displace workers gainfully employed.'* (Kumarappa 1936:99)

Again, knowledge and technology are conceived to be common property and in case of large industries, it was argued that it should be state owned.

*'In the village movement there is a definite place for centralized industries, not for their own sakes, but as adjuncts and subsidiaries to decentralized units, just as in the political sphere a democracy does not eschew governmental control and regulations when it is directed towards the better realization of individual development and expression.'* (Kumarappa 1936:101)

Besides that, the school vociferously argued and devised methods to emphasize that science and technology as practices encountering day to day lives of the ordinary citizens. Thus, it devised 'scientific' methods not only to spinning, but also to sanitation, diet improvements etc.

### **Human, Animal and Nature Relations**

Quite similar to the above lines, human beings and animals are believed to have organically linked to the nature. It is argued that the exploitation inflicted on animals and nature in the name of progress is antithetic to the healthy co-existence. For instance, Gandhi considered scientific research based on vivisection as subjugation of non-human world.

*I abhor vivisection with my whole soul. I detest the unpardonable slaughter of innocent life in the name of science and humanity so-called, and all the scientist's discoveries stained with innocent blood I count as of no consequence* (Gandhi, 1928)

Similarly, it attempted 'scientific' improvisation to the traditional medicinal systems of Ayurveda and Unani.

### **Observations**

Gandhi attempted to give alternative reading to science and technology in the colonial context. For that he questioned the method of scientific and technological practices, objectives (particularly posing moral arguments to it) and also trained a new range of practitioners who were called as scientists. However, he resorted to the same tools



and yardsticks of modernity to question the features of colonial modernity, though it is widely held otherwise.

Secondly, with the emergence of post-colonial studies, Gandhi is depicted to be a cultural icon who posed political epistemological challenge to western hegemony. However, a closer observation of Gandhi reveals that he was more in tune with the criticism of industrial capitalism and colonialism emerged wide across, including in the west. Tolstoy, Thoreau, Ruskin, and Edward Carpenter influenced his thoughts at a significant level.

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